

303. PTERNISTES INFUSCATUS.

Pternistes infuscatus Cab.; Grant, Cat. B. Brit. Mus. xxii. p. 182, pl. viii. fig. 2 (1893); Lort Phillips, Ibis, 1898, p. 425; Grant, Ibis, 1901, p. 299.

a. ♀. Hoorsa, S. Abyssinia, 4th Dec. No. 182.

b. ♀. Hoorsa, S. Abyssinia, 22nd Mar. No. 720.

Iris brown; bill and legs black; throat and face deep red; neck yellow.

[Cabanis's Bare-throated Francolin was generally seen in pairs.—A. E. P.]

304. COTURNIX COTURNIX.

Coturnix coturnix Linn.; Grant, Cat. B. Brit. Mus. xxii. p. 232 (1893); id. Ibis, 1901, p. 299.

a. ♀. Hülül, S. Abyssinia, 1st Dec. No. 149.

b, c. ♂. Katyinwaha, S. Abyssinia, 9th Mar. Nos. 654, 655.

d. ♂. Aroharlaise, Somaliland, 4th April. No. 768.

Iris and bill brown; legs yellow.

305. COTURNIX DELEGORGUI.

Coturnix delegorguei Deleg.; Grant, Cat. B. Brit. Mus. xxii. p. 243 (1893).

a. ♂. Guelan, Somaliland, 25th Jan. No. 391.

b. ♂. Ounji, Somaliland, 19th Feb. No. 547.

Iris brown; bill black; legs pale yellowish brown.

[Not often seen.—A. E. P.]

XLV.—*Results of an Ornithological Journey through Colombia and Ecuador.*—Part III. By WALTER GOODFELLOW, F.Z.S.

[Continued from p. 480.]

(Plate XIV.)

Family TYRANNIDÆ.

162. CONOPOPHAGA AURITA (Gm.).

One male shot in April at Archidona, Eastern Ecuador,

among the thick undergrowth on the river-bank. It was disputing with, or seemed to be disturbed by, the presence of a male *Chiromachæris gutturosa*, and both were shot together. With lowered head, it kept opening and shutting its wings very rapidly, making a curious whirring sound all the time. Iris reddish brown.

163. *AGRIORNIS SOLITARIA* ScL.

Three ♂s & 2 ♀s from Quito and its environs. They are common birds around the city, and may be seen everywhere on the house-tops, especially during the months of November and December, when they appeared to be in greater numbers. They have loud liquid notes, but the song is not sustained. We saw them on the Western Andes at altitudes of from 8500 to 11,000 feet, where they generally sat about on the rocks and stones, but not at any of the localities where we collected on the Eastern Andes. In Quito they nested under the tiles of the roofs and in the church towers. Iris light brown. Local name "Solitario."

164. *MYIOTHERETES ERYTHROPYGIUS* ScL.

One male from Pichincha, Western Andes, at 14,000 feet, and one male from the Guamani Pass, Eastern Andes, at nearly 16,000 feet. I noticed these birds at other elevated localities on both sides of Ecuador, but always singly. The rufous bases to the tail-feathers make them conspicuous when flying. The Eastern specimen is rather paler on the head than the one from the Western Andes. The stomach contained small moths and beetles.

165. *MYIOTHERETES STRIATICOLLIS* ScL.

Two males from Pichincha, at about 10,000 feet elevation. Found sitting on the tops of the low bushes, whence they fly upwards into the air with a kind of somersault-motion, apparently taking their insect-prey on the wing.

166. *OCHTHODIÆTA FUMIGATUS* (Boiss.).

Three males from Pichincha from an altitude of between 11,500 and 13,000 feet, and one male and one female from Papallacta, Eastern Andes, 11,500 feet. All our specimens

from both sides of Ecuador were shot at sunset, the only part of the day when we observed these birds. They seemed to feed principally on small moths, which they caught on the wing near to the ground. The female is more reddish about the vent than the male.

167. *OCHTHÆCA CENANTHOIDES* (Lafr. & D'Orb.).

This is *O. cenanthoides brunneifrons* Berl. & Stolz. We obtained 4 ♂s and 2 ♀s from Pichincha, Mojanda, and Papallacta, Western, Central, and Eastern Ecuador, at altitudes above 11,000 feet. It was generally seen singly on the highest twigs of low bushes in the sheltered ravines or "quebradas."

168. *OCHTHÆCA CITRINIFRONS* Scl.

Five ♂s, 2 ♀s. West side of Pichincha and Papallacta at altitudes of from 11,000 to 12,500 feet.

169. *OCHTHÆCA LESSONI* (Scl.).

Six ♂s, 2 ♀s, from Pichincha and Aloag, West Ecuador, the Mojanda Pass, North Ecuador, and Papallacta, East Ecuador. Common at high altitudes on both Cordilleras.

170. *OCHTHÆCA RUFIMARGINATA* (Lawr.).

Six ♂s, 6 ♀s from the western sides of Pichincha and Corazón, Western Andes, at altitudes of about 12,000 feet. All those we shot in September on Corazón were in pairs. The females appear to be shorter in the wing than the males.

171. *OCHTHÆCA CINNAMOMEIVENTRIS* (Lafr.).

Two ♂s, 1 ♀. Lloa; Pichincha.

172. *OCHTHÆCA GRATIOSA* Scl.

Eight ♂s, 5 ♀s. Intag, Mindo, and above Milligalli, Western Ecuador. We found these birds very plentiful at the last-named locality in September. They were evidently then commencing to nest, as the males were constantly chasing the females.

173. *OCHTHÆCA STICTOPTERA* (Scl.).

Six ♂s, 5 ♀s from high altitudes on Pichincha and Corazón, West Ecuador, Papallacta, East Ecuador, and one specimen

shot on the road crossing the Mojanda, North Ecuador. These birds were seen in pairs on Corazón in September, but singly on the Eastern Andes in February.

174. *SAYORNIS CINERACEA* (Laf.).

Two ♂s, San Nicolas, in the forests of the Pacific side, and one ♂ from Papallaeta, Eastern Ecuador, 11,500 feet. The latter has the wing-coverts edged with cinnamon. They frequent stones in the river-beds and dead stumps in marshy places. Iris reddish brown.

175. *COPURUS COLONUS* (Vieill.).

One male, Archidona, Eastern Ecuador. Rare in this region, for we never saw but one specimen.

176. *MUSCISAXICOLA ALPINA* Jard.

Two ♂s, 1 ♀, Pichincha, 15,000 feet, and one ♀ shot near the summit of the Guamani Pass, Eastern Andes, 16,000 feet. These birds are solitary in their habits and sit about among the grey cinders, consequently they are difficult to see, while they do not take wing until one is close to them.

177. *PLATYRHYNCHUS ALBOGULARIS* Sel.

Two ♂s, 1 ♀. San Nicolas and Gualea, in the western forests. This species is generally to be observed in the evening, and always singly. It frequents low bushes near the edges of the forest, where the ground is damp and marshy. It has a curious note, much resembling the croak of some kinds of frogs.

178. *TODIROSTRUM SCLATERI* (Cab. & Hein.).

Todirostrum sclateri Sel. Cat. B. xiv. p. 71.

Five ♂s, 4 ♀s. Intag, Santo Domingo, and San Nicolas. Common at the two latter places, especially in the evening among the orange-trees. After the trees had finished flowering we seldom saw one about. Iris yellow.

179. *TODIROSTRUM RUFIGENE* Sel. & Salv.

Todirostrum rufigene Sel. Cat. B. xiv. p. 76.

Two ♂s. Baeza, Eastern Ecuador. Iris light reddish brown. Evidently rare in this locality.

180. *EUSCARTHMUS SQUAMICRISTATUS* (Lafr.).

Six ♂s, 7 ♀s. Common at San Nicolas in September, but during a few days' stay there at the end of the following month we did not observe a single individual in their former haunts. We also procured specimens at Santo Domingo and Guanacillo in the western forests.

181. *PSEUDOTRICCUS PELZELNI* (Tacz. & Berl.).

Pseudotriccus pelzelni Tacz. & Berl. P. Z. S. 1885, p. 88.

Two ♂s. One from Milligalli and the other from Gualea, West Ecuador. Both were shot in high trees and among the creepers. The birds appear to prefer the more open parts of the mountain-slopes; they are restless, and utter an incessant monotonous note, much resembling that of *Myio-bius ornatus*.

182. *HAPALOCERCUS ACUTIPENNIS* ScL. & Salv.

One male only, from the Santa Carolina marshes just outside Quito on the north, and evidently scarce there. This species lives among wiry grass, clinging to the longest bents as it flies from clump to clump. Iris dark red.

183. *POGONOTRICCUS OPHTHALMICUS* (Tacz.).

Three ♂s, 2 ♀s, from the western sides of Pichincha and Corazón along the edge of the forest-limit, keeping to the thicker parts.

184. *SERPHOPIHAGA CINEREA* (Strickl.).

Four ♂s, 1 ♀. Intag, Mindo, and the Chillo Valley.

185. *SERPHOPIHAGA RUFICEPS* (Lafr.).

One male from Mindo, Western Ecuador.

186. *SERPHOPIHAGA PÆCIOCERCA* (ScL. & Salv.).

A single male from Nanegal, Western Ecuador.

187. *ANÆRETES PARULUS* (Kittl.).

A large series of birds from the neighbourhood of Quito, where they were very common during the months of November and December along all the hedgerows. In the way they cling to the twigs &c. they much resemble some of our English Tits. They go about in small flocks of from nine to a dozen,

and are very tame. We shot two at Tulcar, on the northern frontier, but they did not appear to be so common there as they were around Quito. In Ecuador this species is doubtless confined to the central region, for we met with it neither on the eastern nor the western sides. The female has a shorter crest than the male.

188. *ANÆRETES AGILIS* ScL.

Four ♂s, 2 ♀s, from the eastern slopes of Pichincha, Pedregal, and from Papallacta, Eastern Andes, 11,500 feet. The single male from Pedregal differs from all the others in being of a lighter and browner shade throughout. This species is very local, and we never observed more than a pair together. The few we saw at Papallacta were among the ruins of the mud huts, and I caught one in the thatch of ours, where it had gone to roost for the night.

189. *MIONECTES OLIVACEUS* (Lawr.).

Four ♂s, 2 ♀s. The males we shot at San Nicolas and Gualca and the two females at Canzacota. The latter have the under wing-coverts strongly shaded with olive-green, which the males have not. Found singly in the higher trees where most covered with creepers.

190. *LEPTOPOGON PÆCILOTIS* ScL.

One male from the lower western side of Pichincha.

191. *TYRANNISCUS NIGRICAPILLUS* (Lafr.).

Two ♂s, 2 ♀s. From the western slopes of Pichincha and Corazón. This was the only species of *Tyranniscus* we found singly. It frequented high trees and was not common. The females have shorter wings than the males, the outer margins being edged with cinnamon.

192. *TYRANNISCUS CINEREICEPS* (ScL.).

Two ♂s, 1 ♀. Intag. Iris light yellow.

193. *TYRANNISCUS CHRYSOPS* ScL.

Four ♂s, 6 ♀s. Gualca, Intag, and Nono, West Ecuador. In small flocks, and fairly numerous in the more open parts.

194. TYRANNISCUS PARVUS Lawr.

Six ♂s, 6 ♀s. These birds were common at Santo Domingo and Guanacillo in October. They frequented the fruit-trees, especially the guavas, in the clearings around the huts, clinging to the flowers and twigs, and searching for insects all day long. They were so tame that on two occasions I caught examples in a butterfly-net.

195. ELAINEA PAGANA (Licht.).

Two ♂s. Archidona, Eastern Ecuador. Frequents the clearings around the Indian huts.

196. ELAINEA ALBICEPS (Lafr. & D'Orb.).

Four ♂s, 1 ♀. Pichincha and Papallacta, Western and Eastern Ecuador. Solitary in habits, and frequenting open situations.

197. ELAINEA PLACENS (Scl.).

A single male from Intag.

198. LEGATUS ALBICOLLIS (Vieill.).

One ♂. Santo Domingo, West Ecuador. Scarce.

199. MYIOZETETES CAYENNENSIS (Linn.).

Five ♂s, 3 ♀s. Common in the clearing during the first week of our stay at Santo Domingo, but after that we did not see any. This species seemed to keep entirely to the banana-plantations.

200. MYIOZETETES GRANADENSIS (Lawr.).

Three ♂s, 1 ♀, from near the mouth of the Coca, Upper Rio Napo. Common in isolated trees in the clearings around the Indian huts. Always found in open situations, and seemingly more numerous during the hot hours of mid-day. It has the same habits as *Tyrannus melancholicus*.

201. RHYNCHOCYCLUS PERUVIANUS Tacz.

Rhynchocyclus peruvianus Scl. Cat. B. xiv. p. 169.

One male. San Nicolas. This single example flew into the hut at night, attracted by the lamp-light.

202. PITANGUS SULPHURATUS (Linn.).

A male, shot on the Coca, Upper Rio Napo. Probably

not rare, but, like *Myiozetetes granadensis*, very local in these parts.

203. *MYIODYNASTES CHRYSOCEPHALUS* (Tsch.).

A male from Gualea, Western Ecuador.

204. *MEGARHYNCHUS PITANGUA* (Linn.).

A male from Gualea.

205. *MYIOBIUS CINNAMOMEUS* (Lafr. & D'Orb.).

Three ♂s, 3 ♀s, 1 ♂ jr. Papallacta, Eastern Andes, 11,500 feet. Our seven specimens were all shot on the morning of Feb. 10th, when they must have been changing their feeding-ground, for we did not come across any more of them during the whole of our stay there.

206. *MYIOBIUS ORNATUS* (Lafr.).

Eight ♂s, 3 ♀s, 1 ♂ jr. Santo Domingo and Gualea. This species inhabits the dense forests, and was common at the former place in trees that were thickly covered with creepers. I never saw it in the open clearings.

207. *MYIOBIUS FLAVICANS* (Scl.).

Three ♂s, 1 ♀. Pichincha and Papallacta, Western and Eastern Andes, at altitudes of from 8000 to 11,500 feet.

208. *MYIOBIUS PULCHER* Scl.

Five ♂s. Gualea and Nanegal, Western Ecuador. This is another species which lives chiefly among the dense creepers that so heavily clothe the trunks of most of the forest-trees.

209. *MYIOBIUS VILLOSUS* (Scl.).

Myiobius villosus Scl. Cat. B. xiv. p. 201.

One male, Gualea. I should think it doubtful whether one of the types of this species (as stated in the Brit. Mus. Cat.) came from the Rio Napo, Eastern Ecuador.

210. *PYROCEPHALUS RUBINEUS* (Bodd.).

Eight ♂s, 3 ♀s, 2 ♂s jr. Popayán, Colombia, 5600 feet; Ibarra, North Ecuador, 6600 feet; and the Chillo Valley, near Quito, about 7000 feet. We first met with this widely distributed bird on the higher Western Andes of Colombia

at the back of Buenaventura. From Cali it was exceedingly common throughout the Cauca Valley down to Popayán, but thence southward we did not see another example until we reached the hot sandy valley of the Chota, in Northern Ecuador; then again in the Chillo Valley it was fairly numerous, especially around the village of Tumbaco.

The birds frequent open situations and (with the exception of the neighbourhood of Popayán) sandy soil. With crest erect they sit silently waiting for passing insects, which they take on the wing, returning to the same twig with graceful evolutions. Local name in Colombia "Titurivi."

211. *CONTOPUS BOREALIS* (Sw.).

Two ♂ s. Gualea, Western Ecuador.

212. *CONTOPUS ARDESIACUS* (Laf.).

Two ♂ s, 1 ♀, from Gualea, Western Ecuador, and 2 ♀ s from Baeza, Eastern Ecuador. The latter differ somewhat from those from the Pacific side in being much lighter on the lower parts of the breast and vent, and in having the wing-coverts edged with light brown.

213. *MYIARCHUS NIGRICEPS* Scl.

Five ♂ s, 2 ♀ s. Intag and Gualea, West Ecuador. Fairly numerous. The females have the under wing-coverts brownish yellow.

214. *MYIARCHUS FEROX* (Gm.).

One male from Archidona, Eastern Ecuador.

215. *TYRANNUS PIPIRI* (Vieill.).

One male from Gualea. Iris brownish red.

216. *TYRANNUS MELANCHOLICUS* (Vieill.).

Six ♂ s, 2 ♂ s jr., 3 ♀ s. Popayán, Colombia, and Santo Domingo, Western Ecuador. Very common throughout the whole of the Cauca Valley up to altitudes of 6000 feet, where it is often called "Toreador." In Ecuador it is more local, and may be common in one place though not seen at all in a similar spot only a few miles away. Its favourite resort is pasture-land sparsely dotted with trees.

The young have the wing-coverts and tail edged with brown, and the throat much lighter than the adult birds.

217. *MILVULUS TYRANNUS* (Linn.).

This is another bird exceedingly common throughout the Cauca Valley, and is locally called "Tijeretta." We first met with it at an altitude of about 5000 feet on the western side of the Andes on the road to Cali. We never saw it anywhere south of Popayán, and nowhere at all in Ecuador. It always settled on the topmost twigs of the hedges, low trees, or bushes, and perhaps still more generally low down near the ground on any plants growing in the meadows. It fed exclusively on insects, chiefly on the small moths which were so abundant among the grass. When we were leaving Popayán in June, I noticed that the birds were beginning to collect in flocks, and flew at a great altitude in the air.

FAM. PIPRIDÆ.

218. *MASIUS CHRYSOPTERUS* (Lafr.).

Two ♂s, 1 ♀. Baeza. This species is confined to the eastern side of the Eastern Andes, and did not appear to be so numerous as *M. coronulatus* of the Western Andes. In March we found it in pairs, frequenting the lower and thicker vegetation. It utters continuously a sharp note resembling the sound produced by two pebbles knocked together. The legs, feet, and mandible are dark red.

219. *MASIUS CORONULATUS* ScL.

Four ♂s, 2 ♂s jr., 2 ♀s. Canzacota, Gualea, and Intag, Western Andes. Legs and feet dark red.

220. *PIPRA FILICAUDA* Spix.

Two males from Archidona, Eastern Ecuador. Both were met with alone in the clearings around the Indian huts, going from bush to bush with a low jerky flight.

221. *PIPRA AURICAPILLA* Licht.

One male from the Coca River, Upper Rio Napo, in June.

222. *PIPRA ISIDORI* (ScL.).

One male and one female from Baeza, Eastern Ecuador.

223. *PIPRA LEUCOCILLA* Linn.

Two males from Baeza. Both were shot in the forests.

224. *MACHÆROPTERUS DELICIOSUS* Scl.

Six ♂s ad., 2 ♂s jr., 2 ♀s. Gualea, Intag, and Mindo, West Ecuador. The young males differ from the females in having reddish throats. Local name "*Ala hueso*."

225. *CHIROMACHÆRIS MANACUS* (Linn.).

Two ♂s, 1 ♀. Archidona, East Ecuador. I saw a male dancing around a female with its throat much distended, but the only sound I could hear was a curious noise produced, I believe, by a rapid motion of the wings. Legs and feet yellow, claws black.

Fam. COTINGIDÆ.

226. *TITYRA CAYANA* (Linn.).

1 ♂, 2 ♀s. Rio Suno and Rio Coca, Upper Napo. In May a pair of these birds had a nest at the mouth of the Suno in a hole in a dead tree standing in the clearing and about 50 feet from the ground. They seemed to feed their young entirely on beetles and large grubs. We shot the male bird one day as he was going to the nest, but the next day another male made its appearance and chased the female about, ending by helping her to rear the young. After two days we shot the female and took the nest of five young, two of which we successfully reared. There was a remarkable difference in the sizes of these young birds. Bare skin around the eyes purplish red, base of bill the same colour, tip black.

227. *TITYRA SEMIFASCIATA* (Spix).

One ♂, 1 ♀. Coca, Upper Napo, Eastern Ecuador. Bare skin around the eyes bluish red. Base of bill yellowish, tip reddish grey.

228. *TITYRA PERSONATA* (Jard. et Selb.).

One male from Santo Domingo, West Ecuador. Bare skin round the eyes dark red, base of bill dark red with a bluish tinge, tip of bill black. Iris deep yellow. Legs and

feet black. The birds were scarce in October, but I was told that they were more numerous in May and June. They frequent the open clearings, sitting on the tops of the highest branches of the fruit-trees, and catch their insect-prey on the wing.

229. *TITYRA INQUISITOR* (Licht.).

Tityra inquisitor Scl. Cat. B. xiv. p. 331.

One female shot on the roof of an Indian hut at Archidona. Iris grey. The stomach contained remains of beetles and grasshoppers. I had noticed this bird about for several evenings until it was dark, catching insects on the wing.

230. *HADROSTOMUS HOMOCHROUS* Scl.

One ♂, 3 ♀s. Santo Domingo and Guanacillo. This is a frequenter of the forest.

231. *HADROSTOMUS MINOR* (Less.).

One ♂ ad., 1 ♂ jr., 2 ♀s. Archidona, Eastern Ecuador. Found in the clearings among the thick bushes in the vicinity of the Indians' huts.

232. *PACHYRHAMPHUS SPODIURUS* (Scl.).

One ♂, 2 ♀s. Shot in the forest about a day's walk west of Santo Domingo, where we met with a small flock of about eight.

233. *PACHYRHAMPHUS NIGER* Spix.

One male from Archidona.

234. *PACHYRHAMPHUS ALBO-GRISEUS* Scl.

One ♂, 2 ♀s, from Archidona. Our three examples were all shot along the banks of the river which runs through this village.

235. *PACHYRHAMPHUS ATRICAPILLUS* (Gm.).

One pair also from Archidona, shot among the bushes near our hut. I believe that we found all the members of this genus in pairs.

236. *PACHYRHAMPHUS VERSICOLOR* (Hartl.).

Two ♂s, 4 ♀s, from Intag and the neighbourhood, West Ecuador.

237. *LATHRIA FUSCO-CINEREA* (Lafr.).

One male from Baeza (5500 feet), Eastern Andes. Shot in the clearing. Evidently not numerous there, for we only saw one example during a month's stay.

238. *LATHRIA CINEREA* (Vieill.).

Lathria cinerea Scl. Cat. B. xiv. p. 352.

Two ♂s, 2 ♀s. One pair was shot at a deserted Indian village on the upper reaches of the Suyano, Rio Napo, and the other pair at a Záparo village away in the forest somewhere opposite the mouth of the Coca. These birds frequent the small clearings around the huts, and I think I never noticed more than one pair in each clearing and seldom a clearing without a pair. In the early mornings and late evenings they sit on the tops of the bushes uttering their loud but short mournful strain. The notes evidently resemble some words in the Zápará language, for these Indians regard the birds with superstitious awe, and when we shot a pair they plainly showed their annoyance and it caused quite a disturbance. Fortunately we were leaving the neighbourhood the next day. When I started to skin the birds the Indians left the hut, no doubt thinking that something dreadful would happen.

239. *RUPICOLA PERUVIANA* (Lath.).

Six males were shot on the eastern side of the Eastern Andes a little below Baeza, at an altitude of about 4000 feet, on the trail to Archidona. We met with them singly in the high trees near the banks of the rivers. It is hard to believe that these birds are difficult to detect among the foliage, when one considers their size and the remarkable brilliancy of their plumage, but such is the case. This form is confined solely to the Amazonian side of the Andes, and I imagine it to be rather scarcer than *R. sanguinolenta* of the Pacific side. Certain tribes of Indians who live on the headwaters of the Napo make excursions to the mountain-forests to shoot these birds, as their skins are in great demand by them for decorating their persons and ornamenting their weapons. They also consider the flesh a delicacy, but we found it

tasteless and tough. The skin is yellow and partakes of the colour of the feathers. It is perhaps the toughest skin of any bird I know. Unlike *R. sanguinolenta*, the plumage of this species fades rapidly after death, and conveys but little idea of the wonderful shade that it has in life. No females were met with by us.

240. *RUPICOLA SANGUINOLENTA* Gould.

We shot fourteen males at Gualea in August and at Milligalli in September, at altitudes of from 4000 to 6000 feet, on the western side of the Andes, when they were in perfect plumage. We saw females on several occasions, but always in places where, had we shot them, we could not have recovered them. The habit these birds have of crouching down renders the females with their duller colouring less conspicuous. Their chief place of resort at Milligalli during certain hours of the day was along the sides of a narrow river with precipitous rocky sides, more or less covered with overhanging flowering bushes; and here, where the sunlight fell in strong contrasts, the Cocks-of-the-Rock sat motionless among the vegetation. Unless one saw them settle or knew that this was their haunt, it was easy to pass them by unobserved. They fed on the hard berries of a bush which grows freely by the river, but to what family it belongs I am unable to say. Opposite to the one hut which constitutes Milligalli rise perpendicular cliffs, and on the ledges where small plants grow this species builds its nest. I was told that the nesting-season is in May and June, and that prior to that time the loud harsh call of the male birds is a familiar sound in the early mornings, when they assemble to choose their mates and indulge in their curious antics. These assemblies, however, are not solely confined to the breeding-season, for in August, near Gualea, we found a spot where we were able to watch their proceedings unobserved for several mornings in succession. It was on a broad flat ledge of rock overhanging a steep bank well screened by vegetation. Between 7 and 8 A.M. from ten to seventeen birds, mostly old and young males, would gather together. The majority of them huddled together under the bank,

while one went through his antics of running backwards and forwards along the ledge with his back arched, tail spread out, and beak held down close to the ground. After doing this several times he would throw his head back, and spreading out his wings so that the tips touched the ground, make several gyrations, ending by leaping into the air and jerking his head forward much after the manner of a Hoopoe. Sometimes two birds would do this together, and when they leapt into the air facing each other they appeared to strike each other with their feet. The ground where they held these gatherings was worn quite bare and smooth.

These birds are local, and are to be met with only at certain places on the Pacific side, and not continuously all along the heights at the same altitude. In life the bill, legs, and feet are only a trifle lighter in colour than the plumage. Local name "Gallo de las Peñas." In January 1899 I sent a native to Milligalli to try and get me some females, but he was unsuccessful, and brought me only a few males in heavy moult.

241. *PIPREOLA RIEFFERI* (Boiss.).

One male from Mindo, West Ecuador.

242. *PIPREOLA JUCUNDA* Scl.

One male from Nanegal, West Ecuador. Shot in the thickest part of the forest, as were all other members of this genus we came across.

243. *PIPREOLA LUBOMIRSKII* (Tacz.).

Pipreola lubomirskii Scl. Cat. B. xiv. p. 380.

Four ♂s and 2 ♀s of this rare bird were obtained at Baeza, East Ecuador. For four days in succession we shot a male on the same tree and on the fifth day the two females. They were feeding on a small black berry.

244. *AMPELIO ARCUATUS* Lafr.

Five ♂s, 4 ♀s, 3 ♂s jr., from Mindo, near Intag, and Guallea, West Ecuador, and from Baeza, East Ecuador. This species was fairly numerous among the lower growth of the forests when certain berries were ripe. The two examples from Baeza are shorter in the wing than those from the western

side, otherwise they do not vary. Bill, legs, and feet coral-red.

245. *AMPELIO CINCTUS* (Tsch.).

Two ♂s, 1 ♀, from Santo Domingo. Iris pale yellow. This species is more solitary in its habits than the preceding. It also frequents higher trees, and as it is more difficult to get at it appears to be less numerous. It does not frequent a higher altitude than 1500 feet.

246. *HELIOCHERA RUBROCRISTATA* (Lafr. & D'Orb.).

A large series from both Western and Eastern Ecuador at altitudes between 10,000 and 12,000 feet. The birds frequent bushes and low trees in flocks of about a dozen, feeding entirely on berries. Although they were numerous on Pichincha we never secured a female there, and only two at Papallacta, where they were still more plentiful. Iris scarlet.

247. *COTINGA MAYNANA* (Linn.).

Two males from the Upper Napo. They mostly frequent the trees along the river-banks. They appear to be not at all common on this river, for all the Indian tribes prize their bright plumage highly for ornamenting their persons and weapons, and for this reason relentlessly pursue them.

248. *GYMNODERUS FÆTIDUS* *. (Plate XIV.)

Gymnoderus fætidus (Linn.): Scl. Cat. B. xiv. p. 59.

A single male from the Rio Coca, Upper Napo. It was shot in a large tree on the banks of the river, where it was feeding in the company of various kinds of Toucans. The naked skin on the neck was of such beautiful colours, ranging from bright cobalt-blue to pure white, and hung in such curious folds, that Mr. Hamilton thought it best to

* [As has been already stated (Bull. B. O. C. x. p. lix), Selater was so struck by the strange appearance of this specimen that at first he thought it must belong to a new species. But after examining all other available skins, it was found that some of them presented an intermediate appearance, and he finally came to the conclusion that the present example was merely a fully adult male of *G. fætidus*. The Plate has been drawn and coloured from Mr. Hamilton's sketch taken from the freshly-killed bird.—EDD.]



J.G.Keulemans del et lith.

Mintern Bros imp

HEAD OF GYMNODERUS FOETIDUS, AD.

make a water-colour sketch of the head before he skinned it. The whole plumage had a bloom on it similar to that on a plum, which shook off like the powder from a cockatoo's feathers. Iris dark crimson, legs and feet leaden grey. Indian name "Ushqui paua."

249. CEPHALOPTERUS PENDULIGER Scl.

Two males and two females from the neighbourhood of Santo Domingo on the Pacific side. Around that locality the birds must have been fairly numerous at certain seasons, for we ourselves saw them on several occasions out of range. Also in the huts of the Indians I saw some plucked ready for the pot, and from them I secured a large bunch of the pendulous throat-feathers. All those that we shot or saw were in the gloomiest parts of the forests and generally in the tops of the highest trees, while only on one occasion did we see a pair together. They fed on the large fruits of a species of palm of no great height, and while they were feeding in the early morning we were able to secure our specimens by concealing ourselves in the thick bushes at the foot of the tree. The fruits, which they swallowed whole, resembled a hard green date and were quite two inches in length. In repose, and when flying, they carry the long wattle drawn up tightly to the chest: it consists of ring after ring of feathers, all beautifully fitting into one another and forming a thick tassel. The pair we saw together were copulating. The male bird jumped about from branch to branch in front of the female, with his throat (as it appeared to me) very considerably distended. His crest was very full and thick and spread out all around his head. Occasionally he gave utterance to a prolonged grunt, and as he did so the throat-wattle was lowered to its fullest length. I was told by the natives that the nest was in the holes of trees. The skin is tough and coarse, and the flesh of a very dark colour. These birds require a good deal of shot to kill them outright. Local name "Pajaro toro" or "Toro pisco," which both mean Bull-bird—"Pisco" being the Quichua for bird. We only once saw the Eastern species (*C. ornatus*), on the banks of the Rio Cosanga below Baeza.